MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2016/2017

MDE1033 – RAPID MODELLING

(All sections / Groups)

02 MARCH 2017
9.00 a.m. - 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 3 pages with 5 questions only.

2. Answer **FOUR** out of **FIVE** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

Answer **FOUR** out of **FIVE** questions

1. A) Discuss 3 advantages of rapid prototyping (RP).

(9 marks)

B) Brief 8 usages of rapid prototyping.

(16 marks)

(Total 25 marks)

2. A) Fill in the black in these statements;

i. JP System 5 builds model from ____ data using label _____ and a knife plotter. JP5 is a simple and _____ modeller for creating rough 3d models.

ii. _____Particle Manufacturing (BPM) is an old RP technology using printed wax models by firing _____droplets of molten wax from a moving jet onto a stationary platform

iii. The Model Maker (MM) system produces highly accurate wax patterns using _____ printing technology with molten wax.

iv. _____ Modeling (MJM) produces wax prototypes using inkjet technology.

v. Direct Shell Production (DSP) is base on 3DP using _____ as the primary build material.

(16 marks)

B) Give full name to these rapid prototyping acronyms;

i. FDM
ii. LOM
iii. SLS

(9 marks)

(Total 25 marks)

Continued .....

3. A) Deliberate the process of Stereolithography (SLA)

(15 marks)

B) Discourse 5 applications of SLA in rapid prototyping.

(10 marks)
(Total 25 marks)

4. ABS and PLA are among the material that being used in FDM technology for rapid prototyping. Discuss the differences between these materials.

(Total 25marks)

5. A). Explain what is PolyJet.

(3 marks)

B). Brief how PolyJet works.

(12marks)

C). Discuss 5 benefits of using the Polyjet 3D Printing.

(10 marks)
(Total 25 marks)

End of Paper.